

Applicants hereby submit a version with markings to show changes made:

1. (Amended) [A process for delivering a nucleic acid to heart muscle cells in a mammal, comprising:
- a) injecting the nucleic acid into a heart blood vessel with pressure against blood vessel walls;
  - b) delivering the nucleic acid out of the blood vessel to the heart muscle cells.]

A process for delivering nucleic acids to muscle cells in a mammalian heart, comprising: a) accessing an *in vivo* blood vessel; b) inserting an injector into the blood vessel near or in the heart, *in vivo* ; c) injecting a solution containing nucleic acids into the blood vessel lumen and increasing hydrostatic pressure in the lumen; and, d) delivering the nucleic acids to the heart muscle cells outside of the blood vessel via the pressure, wherein invasiveness is limited to accessing the blood vessel, inserting the injector into the blood vessel, and injecting the solution.

18. (Amended) [A process for gene expression providing a therapeutic protein, comprising:
- a) injecting a nucleic acid into a heart blood vessel having a channel leading to heart muscle wherein injection pressure is applied to blood vessel walls;
  - b) delivering the nucleic acid out of the blood vessel to a heart muscle cell; and,
  - c) expressing the nucleic acid to provide a therapeutic protein.]

A process for gene expression in mammalian heart muscle cells, comprising: a) accessing an *in vivo* blood vessel; b) inserting an injector into the blood vessel near or in the heart, *in vivo* ; c) injecting a solution containing nucleic acids encoding a protein into the blood vessel lumen and increasing hydrostatic pressure in the lumen; d) delivering the nucleic acids to the heart muscle cells outside of the blood vessel via the pressure; and, e) expressing the nucleic acids to provide a therapeutic protein, wherein invasiveness is limited to accessing the blood vessel, inserting the injector into the blood vessel, and injecting the solution.

A clean version of each replacement claim is submitted below. Please enter each claim.

D<sup>1</sup> 1. (Amended) A process for delivering nucleic acids to muscle cells in a mammalian heart, comprising: a) accessing an *in vivo* blood vessel; b) inserting an injector into the blood vessel near or in the heart, *in vivo*; c) injecting a solution containing nucleic acids into the blood vessel lumen and increasing hydrostatic pressure in the lumen; and, d) delivering the nucleic acids to the heart muscle cells outside of the blood vessel via the pressure, wherein invasiveness is limited to accessing the blood vessel, inserting the injector into the blood vessel, and injecting the solution.

D<sup>2</sup> 18. (Amended) A process for gene expression in mammalian heart muscle cells, comprising: a) accessing an *in vivo* blood vessel; b) inserting an injector into the blood vessel near or in the heart, *in vivo*; c) injecting a solution containing nucleic acids encoding a protein into the blood vessel lumen and increasing hydrostatic pressure in the lumen; d) delivering the nucleic acids to the heart muscle cells outside of the blood vessel via the pressure; and, e) expressing the nucleic acids to provide a therapeutic protein, wherein invasiveness is limited to accessing the blood vessel, inserting the injector into the blood vessel, and injecting the solution.